

# PUBLIC HEALTH



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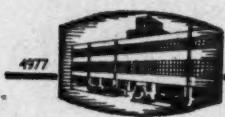
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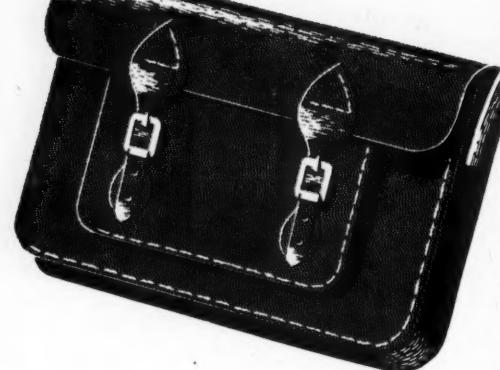
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## CONTENTS

	PAGE		PAGE
<b>EDITORIALS</b>		<b>NEWS AND REPORTS</b>	
Local Government and Hospitals	123	Meat Inspection and Control. Memorandum by the B.M.A., Society of M.O.H. and S.I.A.	134
Healthmen at Scarborough	123	<b>SOCIETY OF MEDICAL OFFICERS OF HEALTH</b>	
<b>SPECIAL ARTICLES</b>		Ordinary Meeting	135
The Changing Face of School Medicine. By Mary L. Gilchrist, M.D., D.P.H.	124	East Anglian Branch	135
Typhoid Fever Control. By John D. MacCormack, M.C., M.Sc., L.R.C.P.I., D.P.H.	128	Metropolitan Branch	135
<b>CORRESPONDENCE</b>		Midland Branch	136
Health Education—Cancer (Malcolm Donaldson)	123	Welsh Branch	136
		Maternity and Child Welfare Group	138
		North-Western M. & C.W. and S.H.S. Sub-groups	138

## EDITORIAL

### Local Government and Hospitals

At the recent annual conference of the Association of Municipal Corporations it was announced that the Association's complete policy statement on local government reorganisation and its comments on the report submitted by the other associations to the Minister of Housing and Local Government would be placed before the council on April 14th and before a special meeting of the members on April 29th. Thus, by the time that this issue is in the hands of its readers it may be assumed that the Minister will have before him the views of all the local authority associations in order to form his opinion whether he can get from them the basis of legislation for reform. Mr. Macmillan said in Parliament recently that the Government would put forward its proposals early in the next session. We are not optimistic about the likelihood of any wide area of agreement being found between the A.M.C.'s policy and that of the other associations, for probably the only common ground is that the reorganisation of local government is long overdue, whereas the vested interests are strong both in and out of Parliament, and there is little electoral appeal in this subject.

The university teachers of politics and public administration who wrote to *The Times* of April 20th urged both the need for reform of local government and also the undesirability of piecemeal reform—"not just areas or functions or finance or organisation." In the Municipal *Journal* of March 12th, Mr. Aneurin Bevan suggested a scheme of reform with an eye mainly to entrusting to about 240 all-purpose authorities the day-to-day administration of the hospital service. Sir Allen Daley has, in the issue of the same journal for April 9th, followed up the idea of transfer of control of hospitals to local authorities and has pointed out as its main attraction that it would bring about the local co-ordination of public health and hospital services, a process which hitherto, despite many admonitions by the Minister and his advisory committees, has had only localised developments according to the amounts of good will existent amongst the officers of the respective bodies and the authorities which they serve. Sir Allen has repeated some of the principles enunciated in his Croonian lectures, including those of mainly elective regional boards and of a large number of regions with consequentially smaller and more manageable areas, linked with reform of local government areas and functions.

The latest voice to urge the return of hospital administration of local health authorities is that of our own President,

Dr. C. Metcalfe Brown, in his address to the conference of medical officers of health at the Scarborough Health Congress. He is looking at the matter from the angle of cost and efficiency and is a firm believer in the principle that the money for the hospital service should be found, and expenditure controlled, by the elected local representatives of those who create the demand.

To say the least, the air is thick with corporate and individual schemes for reform of both local government and the National Health Service, and there is a reasonably strong expectation that something may come out of it during the life of the present Parliament, if Mr. Macmillan and Mr. Macleod, after considering the recommendations respectively of the local authority associations and of the Guillebaud Committee, will put their heads together and take their courage in both hands. We hope that our own ranks will remain steady and undivided and that there will be no hard feelings or recriminations between members of the Society who at present serve different types of local authorities whose interests may appear to clash. It should be remembered that local government reform in the direction of more all-purpose health authorities would at a blow remove many of the causes of frustration, duplication or simple bewilderment and such arguments as those about salary differentials which at present poison the relations between brother medical officers of health.

### Healthmen at Scarborough

As we go to press, the Scarborough Health Congress of the Royal Sanitary Institute is about half way through its course and has already produced an excellent presidential address by Lord Feversham, with an emphasis on mental health, and several outstanding sessions, notably that of the preventive medicine section on the new epidemiology and that of the M.O.H. conference on poliomyelitis. At the moment we should like to single out the use of the word "healthmen" by Dr. Henry F. Vaughan, of Michigan, as a Transatlantic contribution to the common English tongue. It is curious that a people who have thought up such simple and affectionate eponyms as "sawbones" for surgeons, "croakers" and "pillslingers" for physicians, "trickcyclists" for psychiatrists, and "seamen," "airmen" and "spacemen" for other existing or prospective callings, has so far failed to give us a better label than the initials "M.O.H." So a health from the healthmen to Dr. Vaughan!

The next Ordinary Meeting of the Society of Medical Officers of Health will be held in Manchester on Friday, June 18th, next, at 2.30 p.m., when the election of the President and other officers for 1954-55 will take place. The full agenda will appear in the June issue of *Public Health*.

## THE CHANGING FACE OF SCHOOL MEDICINE\*

By MARY L. GILCHRIST, M.D., D.P.H.  
Assistant County Medical Officer, Essex; Deputy  
M.O.H., Borough of Leyton

For a long time now the criticism of the School Health Service which has irritated me most is the one which declares that we are in a "rut," and are merely carrying out, in an unimaginative way, duties that were laid down nearly half a century ago. I am prepared to accept criticism which is constructive, which points out our deficiencies, inadequacies and mistakes, and to improve and amend these when necessary, but I am not prepared to accept the criticism that the service is out of date and has never changed since its inception.

I hope to show this afternoon how it has progressed logically and has undergone that "organic development" predicted by Newman, the first Chief Medical Officer to the then Board of Education; how it has met each new need as it has been revealed by our experience and how it has catered for those needs in whatever manner has been required and justified by the resources at our disposal. I should also like you to remember that I speak to you not from the standpoint of the administrative officer seated at a desk, but out of the experience gained over a period of 22 years as a field worker engaged daily in school and clinic and conscious all the time of the parents and children who are my teachers. I have chosen the title of my address deliberately because I am so deeply aware of the changes that have come over not only our service but these same children and ourselves.

How best to show this change gave me much thought. At first it seemed best to do it with graphs and charts and much statistical material but, after spending much of my own time and that of our clerical staff in producing rows of figures, I decided it was not the right method. If I demonstrate to you that the deaths from rheumatic fever and heart disease in children under 15 years of age have shown a steady fall from 1930—as shown in Table I—it would look as though I were claiming this as our achievement.

TABLE I

Period	Death rate per million at ages under 15 years	
	Rheumatic fever	Heart disease
1901-1910	56	132
1911-1920	54	117
1921-1930	56	88
1931-1939	43	60
1940-1949	23	28
1942	18	36
1944	29	39
1946	18	25
1948	22	24
1950	17	17
1951	9	12

(Abridged from Table VI, page 103, Report of Ministry of Health, Part III, 1951.)

That, of course, would not be true; we are but one of many and diverse factors operating in this field. Equally misleading I found graphs of defects noted at routine medical inspections since severity of defects may lessen though still noted, or, because of expanding services, comparisons between one year and another became impossible.

I have chosen, then, what I call the historical approach—that is, noted our expansion year by year and how, starting as a School Medical Service, we are slowly changing over to a School Health Service. This necessity to be a medical and treatment service as well as a preventive service was imposed upon us by circumstances, if not by conscious design, but our idea of treatment was somewhat different

\* Presidential Address, slightly amended, delivered to the School Health Service Group, October 16th, 1953.

from that held by the usual medical agencies. Our aim was so to treat the child that "he was able to benefit from the education provided for him." In other words, we dealt with the whole child, not just a part of him. The child has always been more to us than the disease and, in making him fit for education, we were making him fit for life itself.

In the early years of this century medical treatment for many children was not easy to come by. In his report for 1908 the Medical Officer of Health for Bradford, Dr. Lewis Williams (1908) was constrained to say that, after 15 years of medical inspections, the defects discovered among Bradford school children remained untreated despite the medical agencies, the private practitioners, the Royal Infirmary, the Children's Hospital and the E.N.T. Hospital apparently available to all.

Dr. later Sir, George Newman's reports endorsed all that the Bradford Medical Officer of Health had found and it was soon evident that inspection without treatment was a waste of time and money. It was not enough that skilled medical advice should be available; it had to be organised before the children could take advantage of it; it had to be available in a form convenient of access or the neglectful parent would not accept or seek treatment, or complete it when begun; and it had to be within the parents' economic resources or free if the circumstances required it.

The great majority of defects found at these early routine medical inspections, apart from those caused by poverty and under-feeding, were due to dirt and ignorance, neglect and bad home conditions as well as to lack of medical care. The first clinics set up were, therefore, "minor ailment" clinics in which a school nurse could work, along with the school medical officer, and deal with these "dirt" diseases. The growth of the minor ailment clinic was pitifully slow at first. The provision of any treatment centres produced the usual protests about undermining the parents' sense of responsibility—a complaint still heard to-day!

### Growth of the Service

As you see in Table II, by 1910 only 21 Local Education Authorities had provided treatment centres. The greatest impetus to their extension came from the revelations of the medical boards during 1914-18 and the clauses in the Fisher Act making the provision of treatment facilities compulsory for the elementary school child. By 1938 there were still three areas where treatment facilities were not available.

TABLE II

Year	Number of L.E.A. providing treatment in school clinics	Number of clinics providing for:			
		Minor ailments	Dental defects	Visual defects	Orthopaedic defects
1910	30	21	14	Not recorded	
1914	179	254	189	"	"
1921	291	749	567		
1925	312	891	955	552	70
1929	316	1,008	1,151	606	228
1938	314	1,279	1,673	774	382

(Abridged from "The Health of the School Child, 1938," page 65, Table XI.)

Next to the poverty and dirt diseases, defective vision and dental caries and sepsis were the outstanding defects revealed at the early inspections but these "special" clinics also got off to a slow start, as Table II shows.

However, once the mass of obvious disabilities were provided for, progressive education authorities began to enlarge their treatment facilities. They did this, not to take work away from the existing agencies but because the treatment was, in the main, not being provided at all or it was so difficult or expensive to obtain that it was never started, or, if started, not completed and the child was left with his disability or only partially restored to health or fitness.

Early in the 1920s the special clinics began to make their appearance in areas all over the country. By 1925 there were 70 orthopaedic clinics, rising to 382 in 1938. Along with these went the appointment of physiotherapists and, in many areas, ultra-violet ray clinics were combined with the orthopaedic clinic.

With the improvement of the mortality figures in children of school age from other diseases, the returns noting rheumatic fever and heart disease as a cause of death in children of school age began to loom more prominently than in the earlier years of the School Medical Service and many education authorities started "rheumatism" clinics and an increasing number of hospital schools were provided in the late 1920s and early 1930s. About this time, too, Child Guidance Clinics made their appearance and many Local Education Authorities agreed to support cases attending them even if they did not actually run one themselves.

In the 20 years, then, from 1918 to 1938, the foundations of the School Health Service were laid. If every Local Education Authority had implemented the 1921 Act as fully as the more progressive authorities had done, and if there had been no panic economy measures cutting down the services in the days of the "depression," the bills we are having to pay to-day for the National Health Service and the needed extensions to the School Health Service would not have been so high.

### Changes in Nutritional States

It was in these 20 years, too, that an effort was made to study nutritional needs and standards. As you all know, the necessity to feed adequately the children in our poorer schools was the first recommendation made by the Royal Commission on Physical Training in Scotland (1903) and the Interdepartmental Committee on Physical Deterioration in England (1904), but the niggardly Poor Law spirit with which school feeding was administered right from the start is rather a shameful story. Even up to the 1930s that spirit persisted. You will remember we were not supposed to order free meals or milk unless the children showed signs of malnutrition. It is true that this was subsequently amended, after protests, to "however slight," but it was not really until the Second World War that this mean spirit was finally exorcised.

It is not only that that attitude has changed, however. Twenty years ago we were all preoccupied by questions of basic needs for health, optimum standards and "measurements of nutrition," fallible and infallible. I can remember a packed meeting (PUBLIC HEALTH, 1935) of specialists and consultants at the Society's old headquarters telling the medical officers of health and assistant medical officers of health there, including the late Dr. McGonigle, that we could give them no scientific evidence that the economic depression was affecting our school children adversely, and so we set about the search for standards, and many measurements were made and many "sums" were done, as the late Prof. Major Greenwood would have said, all in an effort to find a foolproof yard stick for 'nutrition' that does not exist. I even joined in the research myself but, looking back on it all to-day, I doubt if it was necessary.

If a child has no demonstrable disease or emotional feeding difficulties the question of whether or not it is suffering from underfeeding depends mainly on economics. We know what constitutes a balanced diet and how much of certain foods are needed to keep a child fit and well. If we know how much of the weekly wage is left to spend on food per head in a family after all other commitments are met then we know which children require watching on the question of good or bad nutrition.

I think the following extract from PUBLIC HEALTH of July, 1953, illustrates this point. Prof. Fraser Brockington, in reviewing a report on "Domestic Food Consumption in 1950" by the National Food Survey Committee, said, "In terms of the B.M.A. recommendations, the diet of families with over three children was 'marginal.' Both protein and calcium were below standard at all seasons of the year;

vitamin C fell below in April and May; after the lowering of the extraction rate of flour, iron and riboflavin fell below the standard in October and November." He goes on, "We are, therefore, left with little doubt that the average diet of working class families with more than three children in 1950 was only on the borderline of sufficiency." And it should be realised that food prices have risen considerably since 1950.

That the deficiency is much less than it was in pre-war days I am well aware, but it does mean that there is still a necessity for the School Medical Officer to report to the education authority quickly on cost of living changes, remembering that it is the children in our larger families who are the first to suffer from a rise in prices of food. The number of children taking school meals is falling. Is it due to the greater freedom in buying food now that rationing has almost ceased, or is it due to the price of dinners having risen and the parents being unable to pay the increased cost? We should try to find out and act on the information. Perhaps the time has come when we need once more to be occupied by the question of nutrition but this time from the economic angle.

Of course, none of us has any doubts about the improvement in the children's nutrition and general well-being and that particularly in the last 10 years. I know that Martin has suggested in his memorandum on "The Physique of Young Adult Males" (1949) that there has been no real increase of average height. The steady increase in the heights and weights of school children shown in our returns since 1911 has apparently merely brought forward the age of physical maturity from 26 years of age some 50 years ago to 21 years of age to-day. It would be interesting to know if there is any difference in the National Service men reporting to-day. Martin's analysis was done on 1939 figures: but, be that as it may, none of us can doubt that the years of full employment, the priority food policy of the war years, cheap milk for under fives, free milk in school, and the family allowance (in my opinion one of the best social security measures ever brought in) have all helped, and are still helping, to conquer the first of the "biological stresses" for the school child described by the late Dr. Dunstan Brewer in an address on "The Future of School Medicine" given at the Royal Sanitary Institute (1941) when he said: "It soon became apparent to the more enlightened School Medical Officers that the defects they found were not haphazard accidents, but the inevitable outcome of certain biological stresses to which the organism was unable to adjust itself—these stresses could be reduced to three—ill-nutrition, infection, and faulty environment." In 1941 Dr. Brewer was very gloomy, sure that we had still a long way to go to conquer the nutritional deficiencies. I feel he would be much more cheerful to-day but we should remember that the price of good nutrition is eternal vigilance—economically.

I think he would agree that his second "biological stress"—infection—has been greatly reduced in severity but I have no time to enter into the reasons this afternoon.

What of his third "stress"—faulty environment? Here, materially, the picture is not so encouraging for the provision of better school buildings and better homes has been much handicapped by war and its aftermath, but I prefer to deal with a special form of "faulty environment" this afternoon and that is the emotional environment, and here it seems to me we have fresh fields to conquer.

### Emphasis on Mental Well-being

Dr. Margaret Mead, the well-known American anthropologist, in a broadcast after the first International Conference on Mental Health held in London in August, 1948, appealed to the preventive health services to do for mental health what they had done for physical well-being. To-day the children passing through our schools are incomparably better than they were 20 years ago. The children coming into the schools are equally improved; the work of our Maternity and Child Welfare colleagues is also bearing fruit.

Perhaps the statistics of *numbers* of defects found show little change, but those working in the service know that the *severity* of these defects has also been greatly reduced and, indeed, defects are listed to-day which, in the mass of more worrying physical lesions, were rarely listed before the war. One of these coming more and more to the fore is the "Behaviour Problem" or "The Emotionally Mal-adjusted Child." We had already begun to take note of emotional states before Dr. Mead made her appeal but, as she said, it took 20 to 30 years to improve the physique of school children and it is likely to take a similar span of time before we see a comparable improvement in mental well-being.

Until our attention could be released from the pressure of dealing with obvious and remedial physical ills we could not give time and consideration to the less obvious emotional difficulties, and indeed the school medical officer himself had to begin to acquire the knowledge to detect and deal with this new and difficult field of work.

It was not that these behaviour difficulties did not exist 20 or 30 years ago. We only have to look at the neurotic adults of to-day, or read the literature of the past, to know that emotional maladjustments have always been with us—at least, in organised and highly civilised societies; but we are to-day more aware of the problem and must equip ourselves to deal with it. At one time I thought that the provision of Child Guidance Clinics would be the answer, with its team of specialists to whom we could refer our disturbed children and their parents, but, obviously, there will never be enough of these highly trained specialists to give an adequate service in every area of the country; the ordinary staff of the School Health Service and Child Welfare Service will have to be the preventive team working with the mass of the child population, sending only the seriously disturbed child to psychiatrist and special clinic.

It is in this field of preventive mental health that the Health Visitor/School Nurse has so much to give and I think that probably the Child Welfare Officer and School Medical Officer should be one and the same person. Preventive health work begins long before school age (as our Maternity and Child Welfare colleagues are well aware) but many children do not show their difficulties until they get to school and the School Health Service must continue this work of preventing or ameliorating emotional difficulties and, if necessary, train itself more to do so.

We must also take stock of the retarded and the dull child. Intelligence testing needs reviewing in the light of experience in the schools. The dogmatism of much of the early work has been shown to be unwarranted and I think the time has come for us to undertake some research work along with our educational psychologist and teacher colleagues into the whole question of the educationally sub-normal child. The 1944 Act is nearly 10 years old; experience has been accumulating about the educationally sub-normal child as distinct from the classification of backwardness under the 1921 Act and I, for one, am not too happy about it. Perhaps we could have a conference with our colleagues of the Ministry of Education on these problems.

We could include in it the "problem family" and the juvenile delinquent. They have always been the families who have refused to cooperate with us when treatment was needed and, apart from the sterile procedure of prosecution, we have tended to leave them too much to their own devices. We are seeking to find a new approach to these families but we still have a lot to learn and must explore new ways with them.

#### What Changes Do We Need in the Future?

I hope I have said enough to show that our service is a flexible one; that as the state of the children has altered so has our service grown or changed to meet their need. Are we really just doing to-day what we did 45 years ago?

Let me remind you of our origins (Newman, 1939). If there is anything that has been proved over the last 50 years

it is the remarkable vision of the men who laid the foundations of the School Medical Service. Here are the eight questions which they set out to consider when devising its structure.

1. Has the child had any illness in the past which would be likely to affect his physical future?

2. What is the present condition of his body as regards cleanliness and nutrition?

3. Are his senses normal—hearing, seeing, taste, touch, smell?

4. Has he sound or decayed teeth?

5. Are the throat and tonsils normal and healthy?

6. Is he normal and sound in mind?

7. Does he show any sign of disease or deformity—rickets, tubercle, rupture, glandular disease, ringworm, anaemia, epilepsy, psychoneurosis, etc.?

8. Has he any weakness or defect unfitting him for ordinary school life and physical exercise or requiring any exemption from any branch or form of instruction?

These questions may be put in an old-fashioned way but we still require an answer to them. The medical history of the child must come from its parents and we must still, by our examination, find an answer to the above questions—even if to-day, fortunately, the physical ills are less severe and the emphasis has shifted to many minor degrees of defect; but the minor degrees of defect may not be so easy to detect and to discuss the problem which may be presented by the child's personality can take a long time.

#### The Routine Inspection

I do not think, therefore, that "rapid surveys" can cope with the more subtle defects we are interested in to-day and I do not believe that the routine medical inspection should be scrapped. The defects we are concerned with, if we are interested in the whole child mentally as well as physically, do not strike the casual observer. The parent should be with the child and, what is most important, the doctor must have time to talk to her in a friendly and personal way so that she feels the School Medical Officer is really interested in the child and not just its possible ailments.

I feel very strongly, then, that the routine medical inspection must stay and that three is the minimum required. For the following reasons I would wish to retain the inspection which takes place about the age of 10 to 11 years.

It is just as important to have a survey of the child after he has been some years in school as it is when he enters school or leaves it to go out into the world. The School Health Service has become a preventive service in a way it has never been able to be until now, and this necessitates discussion with the parents as well as examination of the child for defects. To find out how the child is progressing physically, mentally and emotionally one must talk to the parent and make sure no worries have arisen since the first examination.

Minor degrees of school failure are brought to our notice about this age; some of this is due to innate dullness but some is also due to emotional or environmental difficulties in home or school and it is important that help be given in such cases before the child enters the secondary school.

Parents, too, still feel that this second routine inspection is worth while. In my own district in 1952, 96.5% of parents attended the entrance examination; 79.5% of parents attended the second examination, and this in spite of some 30% of the mothers being at work. The drop in parents' attendance is very marked when it comes to the final examination—38% of mothers attended this inspection. It is true, of course, that the adolescent 14- to 15-year-old does not wish the parent to attend the medical inspection, especially the boys and, also, he can speak up for himself. If your last contact with the parent was eight to nine years before you are going to know very little about that child at his final examination.

For these reasons I still favour a minimum of three routine inspections, which has indeed been the consistent policy of the School Health Service Group.

### The Minor Ailment Clinic

In the area of Leyton these clinics have changed out of all knowledge. The packed clinic, full of children with skin troubles, sores, otitis, verminous heads, with the impetigo and adenitis which went with that state, are things of the past. These dressing cases are so reduced in number that the work can be done by one nurse at each clinic instead of two or three and so the staff can be released for school and home visits.

The school medical officer still sees there the special cases referred by school and medical staff but, of course, not so many cases of acute minor illness now as formerly. Before the National Health Service Act the school medical officer saw many sick children because the parent could not afford a private doctor.

Without the need to write a prescription a great deal could be done for these children and in addition, being practitioners of preventive medicine, we could and did discuss other facets of physical or mental well-being beside the immediate ailment. Perhaps it is this type of case, which we find fruitful and rewarding because of the opportunity it offers to us for preventive work, which our colleagues in curative medicine do not want. They say that their surgeries and hospital out-patient departments are filled with patients suffering from trivial complaints. In the case of the children we are only too happy to relieve them of this burden, if they will allow us to do so. I see signs that this work is coming back to us.

### Changes in the Personnel of the School Health Service

Since 1945 an increasing proportion of our nursing staff has been in possession of the Health Visitor's Certificate and this should prove of great importance in the field of mental health. Their training in the emotional development and the management of children which has been of so much use to them when dealing with "under fives" is not lost when the child goes to school, but this metamorphosis of the School Nurse into Health Visitor could not come until the time was ripe for it, as it surely is in many areas to-day, but not yet, I believe, in all areas of the country.

The work of the minor ailment clinic and the struggle to get the school child "cleaned up" needed the full-time energies of the State Registered Nurse. The special training of the health visitor could not have been put to much use in the old days : she would not have had enough time left over from her hygiene work ; and 15 years ago, even in my own district I doubt if I would have welcomed the change. In Leyton the cleanliness problem is a very minor one now ; e.g., in 1952, 315 cases of uncleanliness discovered in 25,000 inspections is a very small number and the majority of these cases were of minor degrees of infestation.

Our Health Visitor/School Nurse can do the hygiene inspection in her school and use it as the means to survey each child each term in her school. She is allowed to take a proper amount of time to it. From it she can refer to the clinic any child giving cause for worry and it is not just a "hunt for nits." I think, therefore, in areas where a high standard of cleanliness has been reached, it is a mistake to talk of it being a waste of a highly trained person's time to do hygiene inspections for it is one of the ways in which she gets to know her school children well, and not only the children but the Head Teacher and the school staff, too. "Cleanliness Assistants" are not required in an area such as ours : it would make only another person coming into school and not be helpful to anyone. "Dilution" of the staff may be necessary where there is a great shortage of trained personnel and the hygiene problem still a serious one ; but I do not think it is a movement to be encouraged in all districts.\* There is great danger in sending a multiplicity of people from the Health Department into the

\* I do realise that many school medical officers have a serious infestation problem still facing them in their schools and that the "cleanliness assistant" is very necessary indeed, and could not be dispensed with without serious curtailment of the hygiene work in these areas with a high infestation rate.

schools ; neither health staff nor school staff, let alone the children, ever get to know with whom they should deal. Also, I think there is a danger that we hedge ourselves about with a barrier of superiority, refusing to do the routine tasks, forgetting that it is in the day-to-day work that we get to know our children so well and so can see if any deviation from health and fitness is taking place.

### The School Medical Officer

Over the years our service has shown great flexibility in its organisation and in coping with new situations. Similarly, our school medical officers have had to acquire the new knowledge and skill to deal with these problems as they went along by the hard way of experience ; but perhaps this is not quite good enough for to-day.

Twenty years ago the service was still immersed in the ascertainment of physical ills and the training that all doctors had fitted them more or less for this work ; many had post-graduate experience in fevers or children's hospitals and frequently had a D.P.H. in addition. Most of the highly qualified, however, went on to administrative work, but there was no requirement, as there was for Maternity and Child Welfare work, that the school medical officer should have special post-graduate experience and some school medical officers were not equal to the opportunities that the School Health Service offered them. To-day we have highly trained health visitors in our service and we must ask now for some special post-graduate experience in our medical personnel. Do not mistake me. I am not asking for the label "specialist" to be tacked onto us. We are, in the main, pretty ordinary folk who have chosen to work in one branch of medicine ; the general practitioner has chosen another branch ; so has the surgeon. But our medical education has not completely fitted any of us for our chosen branch and to be skilful at whichever one we have chosen we require extra training to do it well.

I think, therefore, all new candidates in the School Health Service should have the same post-graduate training as is required for the Child Welfare Officer and, as soon after appointment as possible, should take a course allied to the course already run by the National Association for Mental Health, but dealing with the whole range of child development, not just intelligence testing alone. Also, training in the assessment of physical handicaps in hearing and seeing, etc., and visits to all types of special schools should be part of this course. It should last for six to eight weeks and all should take it in their first year of appointment. I am not thinking of a refresher course but something more elaborate.

I should like our School Health Service Group to think this out and approach the Ministry of Education medical officers and discuss the possibilities. These ideas are not new. The late Dr. E. H. Wilkins, of Birmingham (1941), thought it was needed and I believe he was right.

I do not believe the future of the School Health Service lies in part-time officers and general practitioners doing the work. Neither do I believe that it is good for the child to be divided up into a series of "specialities" all enquired into and surveyed by different technicians. The school medical officer himself should be equipped to deal with the whole child and then refer to the specialist the deviations from the normal when such referral is required.

Neither do I believe the work is best done by senior registrars serving for a year to gain experience before becoming paediatricians, for the work only reveals its interests and satisfactions when you have done it for a period of years and get to know the school staffs, the children and the parents in a district. As in general practice it is the personal element that counts. The impersonal, detached medical officer has not the right personality for this work and should not be doing it ; the medical officer who finds it boring should quickly be told to go elsewhere—this work is not for him. I do not feel that the fact that every child now has his own doctor makes our service redundant. There is still much we can do for him. Nor the fact that the Regional Hospital Board has taken the responsibility for the payment

of the specialists to attend the clinics we first created means we are no longer interested in seeing that the child really gets the care he needs.

I do not feel a bit despondent about the service—though I sometimes do about the lack of faith which afflicts many of our more senior medical officers who know little of the practical work of the School Health Service. I believe that there was fashioned some 46 years ago in the School Health Service an admirable instrument for the promotion of physical well-being in our younger generation; I do not think it is the instrument that is at fault when it fails; the areas where the personnel have been keen and enthusiastic and where good services have been provided show that it works admirably. I think that our next task lies in the extension to all areas of complete services and the speeding up of that work; in senior officers taking far more interest in the staff working in the field; not paying lip service to the need for research but in seeing that the staff have time and encouragement to do research; and giving them more responsibility in the arrangement of their own work.

The Service has never been treated as it should be; it has been cramped for money, its services curtailed and its resources meagre in too many areas of the country; it is not an expensive service. It cost the local education authorities just over £6,000,000 in 1939 and in 1951 that figure had risen to under £10,000,000. Even if you double that it would compare more than favourably with the National Health Service bill.

It will not grow, however, to its full usefulness unless you have faith in it; enthusiastic juniors need enthusiastic seniors. We have been suffering from an inferiority complex too long; the clinicians and the hospital specialists have been lecturing us about our work. Let us remember when we are so talked down to that we have chosen a special branch of medicine to practise. In Dr. Weaver's appreciation of the late Dr. Ralph Crowley, one of the architects of the School Health Service, he says this, "His concern was not entirely with medical problems; he was as interested in the educational as in the physical development of the child, so that there was never any possibility of the school medical service being for him a mere organisation for the ascertainment and cataloguing of defects" (1953, *Brit. Med. J.*).

Let us remember that we are disciples of Dr. Crowley and men like him, and let me remind you, too, of the words of another great man, the late Dr. René Sand (1953, *Brit. Med. J.*):

"Neither students nor practitioners fully realise that, as Hippocrates already said long ago, in medicine the function of protecting and developing health must rank even above that of restoring it when it is impaired.

"If the nobility of medicine resides in the selflessness of the physician, the hygienist and their assistant, its greatness resides in the scope of the services which they render; and, from this point of view, the medicine which preserves health has a considerably greater influence for good than the medicine which restores health."

#### REFERENCES

BREWER, DUNSTAN. (1941.) *J. R. San. Inst.*, 61, No. 4.  
 MARTIN, W. J. (1949.) The Physique of Young Adult Males. Medical Research Council Memo. No. 20.  
 SAND, RENÉ. (1951.) Quotation from address to W.H.O., appearing in *Brit. Med. J.* (Sept. 5th, 1953), 2, 571-572.  
 WEAVER, ROBERT. (1953.) *Ibid.*, 2, 833.  
 NEWMAN, SIR GEORGE. The Building of a Nation's Health. Pp. 199-200 (Macmillan, 1939).  
*Public Health* (May, 1935), 286.  
 Report of the Royal Commission for Physical Training (Scotland), 1902-03.  
 Report of Interdepartmental Committee on Physical Deterioration (England), 1903-04.  
 Report of the Ministry of Health, 1951, Part III, Table VI, p. 203.  
 The Health of the School Child. (1908.) p. 99.  
 —. (1938.) pp. 65, 68. Tables XI, XV.  
 —. (1951.) p. 137. Table XIV.  
 WILKINS, E. H. (1941.) *Med. Offr.*, 66, 109.

#### TYPHOID FEVER CONTROL\*

By JOHN D. MACCORMACK, M.C., M.Sc., L.R.C.P.I., D.P.H.  
*Deputy Chief Medical Adviser, Department of Health, Ireland*

The ways in which typhoid fever can be spread are now well known and fortunately they are all capable of control. No matter how bad the situation may be in a country, the problem can be successfully solved by careful planning, patience and perseverance. The task is slow, tedious and often heartbreaking, but it can be done. In many countries typhoid, which in living memory was a major scourge responsible for large outbreaks, is now becoming a clinical rarity. This should be of great encouragement to those countries where typhoid is still a serious problem, because ultimate success is bound to be the fruit of sincere and well-directed effort. In combating typhoid fever other major and minor enteric infections will be controlled by the same measures.

Any scheme for the control of typhoid fever will cost plenty of money. Government and local authorities will no doubt be anxious, therefore, to ensure that this money is spent to the best advantage and that it will secure the best possible return. Careful advance planning will help to achieve this, and this planning can best be done by an experienced epidemiologist working in close consultation with Government medical officers and local medical officers. Although certain basic scientific facts and principles are of universal application, it is not possible to produce a uniform plan of typhoid control for application all over the world. No two countries have identical administrative structures, no two peoples have the same habits. These are important considerations when it comes to working out a practical scheme for control of typhoid fever. A measure which is readily applicable in the countries of Western Europe may be entirely out of court for countries in the East because of custom, religion or taboo. It is necessary in such cases to find a way in which to apply the remedy without offering offence to local beliefs or customs.

Bearing this in mind, the following is an attempt to sketch in broad outline the basic principles of control which are of wide application. They represent the framework within which the control of typhoid fever has been operated in this country (the Republic of Ireland).

#### Historical (Period Prior to 1945)

A little over 30 years ago typhoid fever was endemic in this country. It manifested its presence by an unpleasantly large number of epidemic outbreaks. In the majority of cases these epidemics recurred with unfailing regularity every year, and even twice a year, in certain towns and villages. In completely rural areas also there were districts in which the disease was firmly established. In all these areas, whether urban or rural, the basic environmental sanitary services were lacking, and the essential remedy was obvious enough. The point, however, which it is desired to emphasise is that the position here was very bad, so far as proper control was concerned. It should follow naturally, therefore, that the measures which succeeded here could be accepted for application elsewhere, as they proved their worth in actual practice.

Compulsory notification of cases was in force. There was adequate isolation hospital accommodation. There were adequate laboratory facilities for the performance of

\* Based on a paper presented to the Technical Discussion Group of the Sixth World Health Assembly at Geneva in May, 1953.

Widal tests and culture of specimens. Possession of these facilities could do nothing to root out the disease so long as the reservoirs of infection were allowed to multiply and continue unhampered, and the vehicles for mass infection (water and milk) were subjected to gross contamination. To meet the situation it was necessary to proceed according to a definite plan, and to exercise patience in its implementation. The control measures which were applied were as follows:—

I. The provision of proper environmental sanitary services in all large aggregations of population such as cities, towns, and even large villages was the first step. Such provision comprises a safe, abundant, and potable water supply; a proper system of sewage carriage and disposal; a system of house refuse collection and disposal, with consequent abolition of ash-pits. These are an absolute essential wherever large numbers of human beings are collected together in cities, towns, etc. Their provision entails the expenditure of much money, but the returns in reduced incidence of intestinal infections is spectacular.

*Pari passu* with the provision of piped water supplies for urban communities, a nation-wide improvement was effected in the rural areas by the adequate provision of safe wells and pumps for public use. As, however, many farm houses have their own private wells—oftentimes shallow surface wells, and unprotected from surface pollution—as a precautionary measure periodical warnings are issued.

For the benefit of rural areas, where the people have to rely on such shallow wells and unprotected sources for their water supply, whenever heavy rains follow a period of prolonged drought each Chief Medical Officer of Health is advised by circular letter from the Department of Health to warn the people to boil all water for domestic use for a period of three weeks at least. Such warnings are conveyed through the local Press, and by posters in places such as dispensary depots and in the vicinity of places of worship.

Coincident with the provision of major facilities, insect control measures, and instruction in the safe handling, preparation, and storing of food were advocated and taught, because they are valuable preventive measures which can be implemented at comparatively insignificant cost. It must be admitted that our efforts in this sphere were not encouraging in the beginning, as ignorance and apathy are not easily overcome. Too often were our efforts met with the reply, "What was good enough for my father, and his father before him, is good enough for me." There is a devastating finality about that rejoinder which would have dashed the hopes of anyone except the old-time epidemiologist, for he had the mentality of a Methuselah. Ignorance and apathy were familiars to him and did not unduly depress him, for had he not 969 years in which to overcome them?

II. The next important step was the safeguarding of milk supplies from contamination. Apart from typhoid infection, the legislation which was introduced aimed at the production and distribution of clean milk which reached the consumer in a clean condition, thereby guarding against a number of other bacterial infections including those which cause gastro-enteritis in infants, and tuberculosis. While considerable improvement has been effected, progress is naturally slow because the number of small producers, ill equipped and struggling for a living, does not permit of speedy remedy. Progressive legislation is, however, carrying improvement farther, and the goal is not too far distant. There has not been a serious milk-borne epidemic of typhoid fever since 1939.

III. In scattered rural communities the disease generally manifested itself in familial outbreaks, for the simple

reason that living isolated from neighbours a family has no common factor with them in regard to either vehicles or reservoir of infection. Such outbreaks are generally due to carriers who may spread the disease by contaminating food either in its handling or preparation, or through the agency of flies which have fed on their dejecta, or by pollution of a well or water supply where infected faecal material gets washed into it after heavy rain. Of course, where a number of households used a common water supply which had become contaminated, there was a local outbreak of the disease, the cause of which was easily determined as far as the vehicle was concerned. On receipt of the first notification the outbreak was investigated, and any or all of the following measures applied as indicated by the results of investigation:—

- (1) Isolation of the case or cases.
- (2) Immediate steps to protect the water supply from contamination. If this was not possible, its replacement by a safe one within reasonable distance, and in such circumstances the polluted well was closed by filling it up—the only sure way of guarding against its future use.
- (3) Instruction in the safe disposal of faecal matter, and is protection from flies. In this connection chloride of lime was supplied free by the local health authority.
- (4) Instruction in the need for hand washing before preparing a meal or partaking of a meal.
- (5) Vaccination with T.A.B. vaccine.

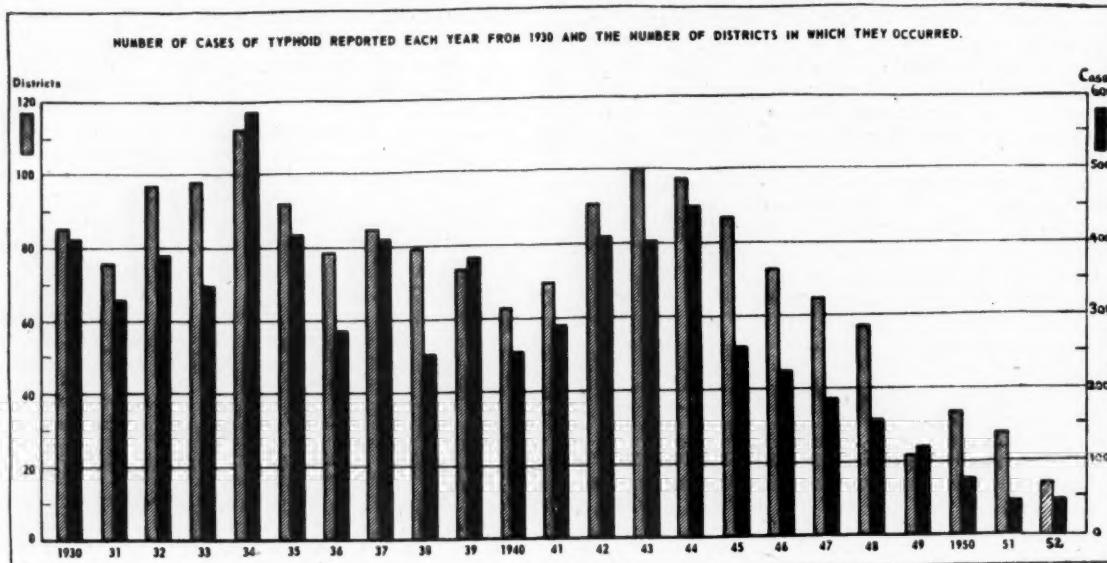
The early stages in an attack on the typhoid problem generally involve considerable expenditure. Much of this expenditure, however, improves the general amenities in a community and, therefore, only a proportion of it should be regarded as a direct charge on the typhoid control scheme. For instance, in the case of improved water supplies and sewerage schemes the provision of these is an important factor in the control of typhoid, but these schemes have other advantages for the community. The cost of providing hospital accommodation and laboratory facilities must, however, be regarded as a necessary expense if the typhoid problem is to be tackled seriously. The extent of accommodation to be provided will depend naturally on the incidence in a country and on the amount of bed accommodation already available. Once these facilities have been provided and the disease in general has been subject to reasonable control, further measures aimed at the eradication of the disease find their place. These involve an attack on the carrier problem. Until comparatively recently the methods for carrier detection were crude, but with the advent of the Vi-agglutination test and selective media the position has altered. For an efficient carrier control scheme the effective co-operation of the public is essential, and this is largely facilitated by health education measures.

#### Control Measures Applied Since 1945

Presuming that the first stage has been successfully carried out and the incidence in cities, towns and large villages has dropped in consequence, the next stage must be put into operation. Despite the fact that a big reduction in the incidence of the disease will have been effected, any country with a long history of typhoid endemicity has still a big problem on hand, because of the number of carriers who are bound to exist among the population. A carrier is capable of starting or causing a widespread epidemic if circumstances bring him or her into contact with food or

drink. The experience of this country was very instructive in this respect. After the provision of water supplies, sewerage schemes, and house refuse collection services (with the abolition of ashpits), the incidence of typhoid fever fell from thousands of cases each year to around some hundreds. The figure remained fairly stable, with an odd peak as a result of a widespread milk-borne epidemic—but it showed no signs of any further reduction. Then it was that the carrier problem was tackled and in the space of eight years the incidence was reduced from about 400 cases in a year to less than 50 (see Figure 1).

FIG. 1.—Typhoid in Southern Ireland, 1930-52.



*(a) Tracing and Control of Carriers*

The first step was to trace the carriers. This was achieved by getting a return from every Health Area of everyone still alive who had suffered from typhoid fever within the previous 15 years. The next step was more difficult. It consisted of the collection of blood samples for Vi-agglutinin testing. The test was used as a sieve or screen, those giving positive reactions in a dilution of 1/5 and under being ignored, and all giving positive reactions in titres of 1/10 and over being followed up by the collection of samples of faeces and urine for culture and typing. The higher the titre the more prolonged was this follow-up until a positive culture was obtained.

As might be expected, every Health Area supplied its quota of carriers discovered by means of this search. As a result of the provision of proper water supplies and sewerage schemes for the towns and villages in the ten years between 1922 and 1932 water-borne typhoid infection was unknown for a long time, and the number of cases, even going back 15 years, was very small, and the number of carriers negligible. Over 95% of the carriers were discovered in the rural areas, where the disease had not appreciably decreased, and where over 60% of the cases came from houses with a previous history of typhoid fever in the family. There were some known carriers before the search started, but their number was small and of little general value except in a few cases of former workers in the dairy business, on whom a careful watch was kept all the time to provide against their taking up this occupation again.

The Vi-agglutination tests were all performed at the Central Typhoid Typing Laboratory, in Cork City.

Having now identified a large number of carriers, the necessary instructions in personal hygiene were given to them, and the need emphasised for carefully observing these precautions, so as to minimise the danger of spread of the disease. Known carriers are not allowed to engage in occupations which entail the handling or preparation of food. Of course, in the case of a mother of a family who had to do the cooking and preparation of the family meals, no such prohibition could be exercised, and here reliance

had to be placed on education in the need for personal hygiene. Familial contacts of known carriers were given T.A.B. inoculations. In all this work the co-operation of the family doctor had to be enlisted, for obvious reasons. To begin with, an apparently healthy person is naturally suspicious when asked to give a blood sample, and still more suspicious and reluctant to give samples of faeces and urine, and would almost certainly refuse if asked to do so by any but the family doctor. Moreover, the family doctor can also ensure the validity of the samples of faeces and urine, as substitution of such samples is not unknown.

By regulation the Medical Officer in charge of a fever hospital was required to inform the Chief Medical Officer of a Health Authority of the condition of a typhoid patient on discharge, *i.e.*, whether a carrier or not. A register of such carriers is kept by each Chief Medical Officer. Use was made of the Vi-agglutination test in this respect, as well as three consecutive negative specimens of faeces and urine taken at one-week intervals. A falling Vi titre is a hopeful sign. The use of the Vi test is a valuable check, as three consecutive negative specimens are of themselves no guarantee. Indeed there are recorded cases where numerous specimens had to be taken (15 and even more) before a positive culture was obtained, and these cases were only persisted with because of a significantly high Vi-agglutinin titre.

Experiments carried out in this country for the treatment of chronic typhoid carriers with intensive penicillin and sulphathiazole therapy proved inconclusive. Urinary carriers were cleared up, but others persisted even after

prolonged treatment. There is a possibility that this therapy or some similar one, if used in conjunction with cholecystectomy in cases which give a history of cholecystitis, would give a higher percentage of success.

The control of carriers is exercised by:—

- (1) their identification and phage typing;
- (2) their instruction in the necessity for scrupulous care in regard to all matters of personal hygiene, including the safe disposal of their dejecta;
- (3) their exclusion as far as possible from any occupation connected with the handling, preparation, and serving of food.
- (4) the operation of the "Food Hygiene Regulations" which give direct and indirect control.

*(b) Phage Typing of Cultures*

In connection with the efficient control of carriers a Central Typhoid Typing Laboratory is an essential. By Vi-phage typing, the organism can be "finger-printed." If cases of typhoid due to a certain Vi-phage type occur in an area where a known carrier of the identical type is living, the epidemiologist has a definite priority line of investigation to pursue, *viz.*—to determine any association with this carrier. If, on the other hand, the cases are of a different type to the carrier's, no unnecessary time is lost trying to fix the blame where it does not belong, and a clear pointer is given for other lines of inquiry to discover the reservoir of infection and the path from the reservoir to the vehicle. It is, moreover, invaluable from the control point of view to know with certainty that the control measures are being applied in the right direction.

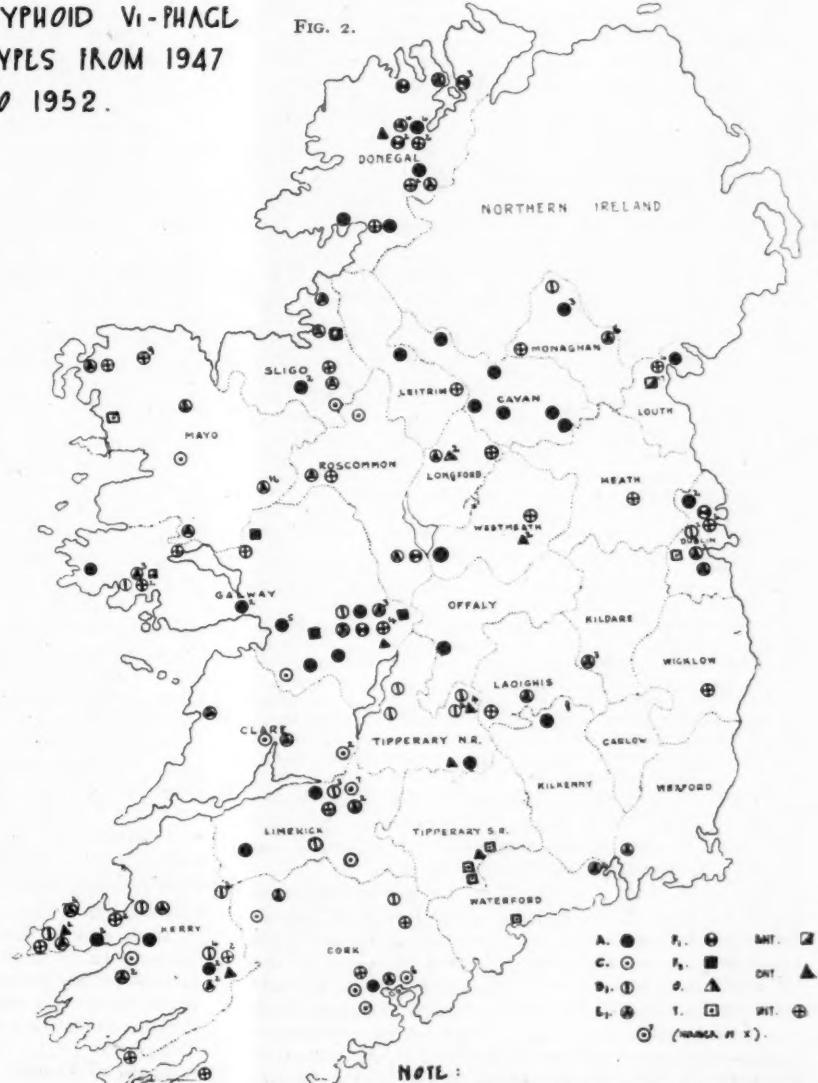
The establishment of a Typing Laboratory is not recommended until control services have been in operation long enough to show a definite improvement in the situation. This will not happen until the fundamental sanitary services have been provided for urban populations, and the provision of proper houses has been energetically tackled. It would be an extravagance for a country to set up a typing laboratory before it had reached the stage of carrier finding and carrier control.

Reference has been made to a *Central* Typhoid Typing Laboratory. This has advantages over a system of small, more or less local laboratories, not the least of which is that

it can be, and has been, the means of forestalling a widespread epidemic. Of course, it is not suggested that a very large country should have only one Typing Laboratory, but the number should be determined by the largest area which can be efficiently served by one such laboratory. Geographical features, facilities for transport, and other considerations must determine any decision in this line.

The Central Enteric Phage Typing Laboratory was established in the University Laboratory in Cork in 1947. When everything was ready a Departmental direction was issued to the effect that a culture of every positive specimen must be sent for typing to the Central Typing Laboratory. To have insisted on every specimen from all over the country going direct to the Central Typing Laboratory would have been open to serious objections, not the least of which would have been the unnecessary strain thrown on the Central Typing Laboratory. At the same time it was

TYPHOID VI-PHAGE  
TYPES FROM 1947  
TO 1952.



essential to ensure that cultures of all positive specimens obtained were sent there. A very simple and efficient check on this is provided by the Special Report Form which must be completed and sent to the Department of Health in respect of every case of typhoid and paratyphoid fever.

This form contains a query on this point.

From 1947 up to the end of 1952 eight definite Vi-phage types were identified, and three untypeable groups of typhoid strains designated respectively BNT, DNT, UNT. Although these last three represent untypeable Vi strains and degraded Vi strains, they still show individual differences and therefore warrant different designations. They are of practical use, too, as the following example will show. If County Sligo is examined on the map (Figure 2), one UNT type will be noted. Investigation of this case resulted in the discovery of a known carrier of this type from Dundalk in Co. Louth who was the source of the infection. This man had been employed in dairy work near Dundalk, but as a result of the discovery of his carrier condition he was prohibited from following this occupation. He disappeared from Dundalk and was only discovered some months later as a result of spreading his infection in Co. Sligo, where he had got a job with a milk supplier. His presence was discovered so quickly that further spread of the infection by him was promptly controlled. A look at the map suggests the possibility that he may have been responsible for the case in Co. Leitrim during the course of his wanderings across country in search of work, but it was not possible to prove this.

Many examples of the value of the Type Map could be given, not alone as an aid to epidemiological strategy, but also as a valuable guide and help in tactics, or field operations. Two examples of this latter use should suffice.

(a) In County Cork typhoid broke out in a winter encampment of itinerants. The mother of the family in which the disease occurred was a known carrier. She was a carrier of Type El. Naturally she would have been blamed in pre-typing days and all efforts would have been directed towards combating the danger from her. However, the cases proved to be due to Type C, so that obviously the mother was not the source of infection. Once this information became available the previous movements of the husband and son (the cases) were carefully investigated. By occupation they were itinerant horse dealers and within the previous three weeks had been operating in Co. Limerick. The district where they had done business was a known Type C infected area, and it was a matter of no great difficulty to trace up the source of their infection.

(b) In Tipperary (South Riding) a small nest of Type T was discovered during the search for carriers mentioned earlier in this paper. The presence of Type T was of interest because it is a South African type. Enquiries were set on foot and it was ascertained that the families in which it was found were those of veterans of the Boer War, who had contracted typhoid fever in Johannesburg, and who had returned as carriers and passed on the infection to their families, and were still carriers (those of them who were still alive).

Two points of interest arise out of this. One is the length of time that a person can remain an excreting carrier. The other is the remarkable consistency of the organism in breeding true to type.

Some years later a report of a case in Co. Waterford which the Department received showed it to be due to Type T. At once investigations were started which early elicited the information that a person from one of the known T type families in Tipperary (S.R.) had recently been employed in the distributing department of the local co-operative creamery. On examination he provided a positive specimen which on culture and typing proved to be Type T. Appropriate action prevented any further spread from this source. It was indeed fortunate, considering the rather awful potentialities of the position, that only one case resulted. The great thing in this life

is to cash in on your luck, and it was the existence of the Type Map which enabled us to do so.

### (c) Other Measures

#### (i) T.A.B. Inoculation

Regarding the use of T.A.B. vaccine, this question requires consideration under four heads:—

- (1) Mass vaccination of a population or a community can only be determined on the spot, and the decision must be governed by consideration of the numbers at risk. In this country it is not practised because it would not be justifiable. It could be advocated in a country where the fundamental environmental sanitation was backward in cities and towns—but it should in no circumstances be used to replace the provision of proper sanitary services. Rather should it be used as an interim protection pending their provision.
- (2) T.A.B. vaccination of familial contacts of a case of typhoid is practised almost as a routine in this country and has given rise to no undesirable consequences, despite the so-called "negative phase."
- (3) T.A.B. vaccination of familial contacts of a known carrier is to be strongly recommended. Where the carrier is a female member of the family engaged in the handling and preparation of food it becomes an essential protective measure.
- (4) Vaccination of closed communities at risk is recommended—e.g., inmates of mental hospitals.

As with all immunisation procedures it is essential that the vaccine used should be efficient, as otherwise discredit will be brought on the procedure by its failure to protect. In this respect a good antigenic strain of the typhoid bacillus for its manufacture is of the utmost importance, and seems to be more effective than the use of indigenous strains because they happen to be indigenous.

#### (ii) Hospitalisation

Home isolation of typhoid patients is a thing to be discouraged, and indeed can only be excused in the absence of any isolation hospital accommodation. In the first place, it is generally a complete misnomer because isolation can only be achieved in the houses of the rich classes. When typhoid fever is nursed at home, and the nursing is carried out by members of the family in overcrowded and insanitary houses without even elementary facilities for cleanliness—let alone disinfection—you have a position so dangerous that it calls to high heaven for remedy. What chance have these people of escaping the infection when we see even trained nurses in well-equipped fever hospitals occasionally becoming infected by patients under their care? For this reason, adequate isolation accommodation must be reckoned a very high priority requirement in any scheme of typhoid control, and in this connection the needs of rural communities are as great as any, because of the overcrowded condition of their inadequate houses, and their remoteness from essential sanitary services.

#### (iii) Housing

No scheme for the control of any infectious disease can be complete or give the best results without a planned scheme for the better housing of the population. There are so many other considerations demanding good housing that mention of this necessity is almost superfluous.

### Success of Control Measures

Figure 1 shows the number of cases each year since 1930, and the number of localities affected. This latter figure is indeed the real test of successful control. To

judge results on numbers of cases alone would easily lead to faulty conclusions. For instance, a large milk-borne epidemic could send the number of cases sky-rocketing, and yet it *might* be that this was the only locality in the whole country which was affected. Conversely, a number of single cases recurring in different localities would give too flattering a picture in regard to numbers of cases alone, whereas the true important import is their widespread nature. To wipe out the infection, not merely to circumscribe its effect, must be the ultimate goal.

The graph shows better than any words could convey the success of the control measures started in 1945. It is not untrue to say that it has exceeded our expectations. Setbacks would not have been unexpected, because it is not easy to apply in practice the control measures necessary in regard to carriers. The continued steady improvement must be attributed to the zeal and ability of the Local Authority Medical Officers in whose capable hands lies the application of control measures.

### Concluding Remarks

For the benefit of workers in under-developed areas of the world, it may be as well to underline the essential prerequisites to any efficient control scheme.

- (1) Early notification of cases.
- (2) Adequate isolation hospital accommodation.
- (3) Adequate laboratory facilities.
- (4) Sufficient trained medical, sanitary, and nursing personnel.

The numbering does not imply any priority importance. All four are necessary, and no one of the four can be done without.

(1) Early notification implies early diagnosis. There can only be early diagnosis if there is sufficient medical staff. Notification must be complete, and whether this objective is achieved by compulsory methods, a reward system, or a combination of both must depend on the psychology of the country concerned. Even in the absence of adequate isolation hospital facilities, early recognition of cases can be turned to good use by protective inoculation of well members of the family and community, instruction in the dangers of home nursing and the ways in which they can be lessened, safe disposal of infected excreta, and proper treatment of bedclothes contaminated by the patient. With the advent of antibiotic treatment, the patient nursed at home has a better chance of recovery than in former times.

(2) Adequate isolation hospital accommodation is essential everywhere. The more backward the country the more necessary does its provision become, because in such a country overcrowded and insanitary dwellings are certain to abound.

(3) Laboratory facilities are needed for the performance of Widal tests, culture of blood faeces and urine specimens, and the performance of Vi-agglutination tests.

(4) Sufficient trained medical, nursing, and sanitary personnel are an obvious necessity. Any Government seriously intending to effect efficient typhoid control must face the necessity of providing such staff. The measure of the success attending the control measures will be the extent to which this requisite has been met. Good organisation and skilled direction of trained personnel are the keys to success.

Before concluding, reference is made once more, without apology, to the very great importance of the investigation of local outbreaks, that is, of single cases or small groups of cases, and the tracing of the source of the infection. By this means alone can action be taken to control the spread and to ensure that there is no repetition from the same

source. Typhoid fever outbreaks are the easiest problems which come the way of the epidemiologist in the field, and the greater the number of cases the easier it should be to find the source. There is nothing miraculous or spectacular about the methods which will give the desired results.

Careful inquiry cannot be over-emphasised, because it is essential for the investigator to be absolutely sure of his ground. The protective measures put into operation will be dictated by his findings, and their success must depend on the validity of his conclusions.

This submission is not a theoretical treatise but a record of practical measures actually carried out. It does not purport to cover every aspect of the problem, nor indeed does it contain a record of all the measures taken for the control of typhoid fever.

The absence of any real problem in this country in regard to paratyphoid fever and *Salmonella*-caused food poisoning is most probably due in great measure to the absence of communal feeding centres. This gives a useful pointer for the strictest control of such centres—even to the extent of periodic checks on the staff.

This paper was originally prepared for the Technical Discussion Group at this year's World Health Assembly. It is published as the result of requests for its publication, and by the courtesy of the Minister of Health and the Director-General of W.H.O., who gave their assent.

The absence of any list of reference is due to the fact that the paper was written without reference to any particular published work. It was written from memory and Departmental records and is based on personal experience. The author, however, wishes to pay tribute to the published works of both living and dead, from whose store of knowledge and experience he has built up and fashioned his own modest competence in the field of Preventive Medicine.

There is, however, one published article to which reference should be made by anyone interested in the control of the enteric fevers. This is "Laboratory Control of the Enteric Fevers" (A. Felix), *British Medical Bulletin*, 1951, Vol. 7, No. 3, pages 153-162. A study of this article, which gives the relevant references, will more than repay the time given to its careful perusal.

The Typhoid Typing Map is kept up to date by the entry of each case and its Vi-phage type when this has been determined at the Central Laboratory.

### CORRESPONDENCE

#### HEALTH EDUCATION—CANCER

*To the Editor of PUBLIC HEALTH*

SIR,—I have read with great interest in the April number of PUBLIC HEALTH Dr. Curnow's Presidential address, in which he incidentally mentions the pamphlet "Life Saving," which is being used in the "Yorkshire Cancer Education Experiment." The figures quoted concerning cancer of the breast in that pamphlet have been criticised as being too optimistic, although they are based on figures given in a lecture by Sir Stamford Cade (*J. Amer. Med. Assoc.*, December 11th, 1948, 138, 1083-1087). Dr. Curnow, on the other hand, thinks that a mortality of 20% in the early cases is depressing, but I can assure him that for the majority of people who read that pamphlet it is a relief, because they were under the impression it was 100%.

Turning now to the very important question in his address as to whether early diagnosis does bring about an appreciable greater number of "early stage" cases treated in hospital, and a greater "five-year survival rate," I venture to suggest that at present there is insufficient statistical evidence to give a reliable answer. It is doubtful if anybody believes that "a short history of the disease" and "early stage growths" are synonymous, because everybody realises the important influence the type of tumour has on the "Stage of the disease" when first seen. At one end of the scale are the early disseminating undifferentiated growths which give rise to metastases before the primary growth is even

recognised or treatment possible, and at the other end of the scale are authentic cases of patients who have had cancer of the breast more than 12 years without metastases, and rodent ulcers which do not metastasise. The question is how many cases are there between these two extremes? McKinnon in his various articles appears to think that there are none, and that cancer can be divided into two types, (a) those that "give rise to metastases" before treatment is possible—"lethal cancer," and (b) those that never metastasise—"non-lethal." It would be a little difficult to disprove such a theory, as the fact that a patient survives would automatically label the tumour as non-lethal.

Dr. Curnow quotes figures which prove that "early diagnosis" and "early stage cancers" are not synonymous, but they do little else. In order to illustrate the "lack of favourable relationship" that exists "between shortness of history and survival rate," he first quotes Harnett's figures for carcinoma of the breast and other accessible sites, comparing the survival of cases with symptoms noticed less than six months before treatment with those cases in which more than six months elapsed. He does not seem to realise that the cases treated after six months are a very selected series, selected by death. The same criticism applies to the figures in a series of carcinoma of the stomach by Swyneston and Truelove, but the authors take pains to point out that the results are not evidence against the value of early diagnosis.

I venture to think that if 70 years ago, when there were many cases of neglected appendicitis, someone had compiled the mortality figures of those cases operated on six months after the first attack, and compared them with those operated upon within that period, he might well have come to the conclusion that it was not worth while operating within the first six months. Cancer is potentially an acute disease and until a large number of figures are collected concerning cases of accessible cancers treated, at latest within one month of the first symptom being noticed, and are compared with those treated after that interval, it will be impossible to decide to what extent cancer education should be carried out, and every effort made to obtain early diagnosis.

Meanwhile, I can assure Dr. Curnow that in the cancer education being carried out under the Yorkshire Experiment, *no promise is ever made that every patient who goes to the doctor at once will be cured*. It is explained that some cancers do not respond to treatment as well as others (although the exact reasons are not gone into) and that a patient who goes as soon as a symptom is noticed has a far better chance of cure.

It is impossible within the space of a letter to take up the

cudgels with Dr. Curnow on the question of "curability of cancer" and the definition of "cure." The only scientific evidence of "cure" would be to examine after death "serial sections" from the scalp to the soles of the feet, which, as Euclid might have observed, is absurd. It seems unfortunate that so much emphasis is being laid on figures, in Dr. Curnow's address and other articles, which are quite inadequate to prove or disprove the value of early diagnosis. Such emphasis tends to prevent local authorities making tests on a large scale, and tends to increase the attitude of "defeatism" and apathy concerning cancer which seems to pervade a large part of the medical profession.

Yours faithfully,

40a, The Shambles,

York.

April 12th, 1954.

MALCOLM DONALDSON,  
F.R.C.S., F.R.C.O.G.,  
Director of Cancer Survey.

#### MEAT INSPECTION AND CONTROL

The following memorandum has been submitted to the Ministries of Health, Food and Agriculture and Fisheries jointly by the British Medical Association, the Society of Medical Officers of Health and the Sanitary Inspectors Association.

#### British Veterinary Association's Memorandum on Meat Production and Control (1953)

The British Medical Association, the Society of Medical Officers of Health and the Sanitary Inspectors Association have jointly considered the recent memorandum prepared by the British Veterinary Association on Meat Production and Control (1953).

While concurring with much of the contents of the Memorandum the three bodies above mentioned dissent from certain views expressed and desire to draw attention to four principles, the application of which is considered essential in connection with any arrangements now in force or under consideration for the future in connection with Meat Inspection and Control.

1. *Health.*—The close association between animal and human disease must be fully appreciated at all times, but the fundamental purpose of meat inspection is to safeguard the health of the individual consumer and the community as a whole. All other considerations must be regarded as secondary to this main purpose. It is therefore necessary that all action with regard to these matters should be considered as an intrinsic responsibility of the Public Health Service.

2. *Administration.*—The British Veterinary Association memorandum recommends that in future meat inspection should be the responsibility, both administrative and executive, of the Animal Health Division of the Ministry of Agriculture. Here the British Veterinary Association has failed to appreciate the fundamental principle that meat inspection is primarily concerned with the health of the community, not with meat production.

The three bodies are unanimous in stating that in their view the central government department responsible for general supervision and advice should be the Ministry of Health, acting jointly with the Ministry of Food.

3. *Local Responsibility.*—The British Veterinary Association memorandum envisages that all meat inspection shall be "under the direction and control of the Animal Health Service of the Ministry of Agriculture and Fisheries" and includes the "taking over of the existing staffs." This implies that the responsibilities which at present lie with local authorities shall be removed.

The three bodies cannot agree with this recommendation and would urge most strongly that the responsibility for local administration shall remain with the local authorities.

4. *Medical Responsibility.*—Meat inspection is only one part of the public health supervision of food in this country and any suggestion that the control of meat should be divorced from that exercised over other foodstuffs is strongly to be deprecated. All those at present associated with these duties fully appreciate the importance of this service to the public health.

The British Veterinary Association has apparently ignored this important principle and in particular the general responsibility of the Medical Officer of Health for the prevention and control of disease, including that transmissible by meat, in so far as local government administration is concerned. It is the unanimous view of the three bodies that this responsibility should continue.

According to the Interdepartmental Committee on Meat Inspection,

"The great majority of meat inspectors will, no doubt, continue to be sanitary inspectors trained in meat inspection, and we regard this as a satisfactory arrangement."

The three bodies are confident that this is a satisfactory arrangement and see no justification for the British Veterinary Associa-

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tion's insistence that veterinary inspectors should be appointed to supervise and control this service.

The British Veterinary Association further suggests that non-veterinary inspectors should function merely as detention officers. The Interdepartmental Committee on Meat Inspection considered this system of inspection and concluded that such a system should not be adopted in England and Wales, a conclusion with which the three bodies agree.

April, 1954.

#### SOCIETY OF MEDICAL OFFICERS OF HEALTH ORDINARY MEETING

An Ordinary Meeting was held in the Committee Room of the Society, Tavistock House, London, W.C.1, on Friday, April 9th, 1954, at 12.55 p.m.

In the unavoidable absence of the President, the chair was taken by Dr. H. C. Maurice Williams (Vice-President), and there were also present 16 members of the Society.

Minutes of the Ordinary Meeting held on February 19th, 1954, were confirmed and signed.

**Honorary Fellowship.**—Sir Andrew Davidson, formerly Chief Medical Officer, Department of Health for Scotland, was unanimously elected an Honorary Fellow of the Society.

**Life Membership.**—The following were elected fully paid Life Members of the Society, on the nomination of the Council and their Branches: Dr. A. J. Shinnie, O.B.E., Major-General Thomas Young, R.A.M.C., C.B., O.B.E., Dr. W. B. Christopherson, Dr. N. Gebbie, Dr. W. Simpson.

**Elections.**—The following candidates, having been duly proposed and seconded were then elected to membership:—

**As Fellows**—Drs. Audrey K. Arnold, Joan A. Barrett, Jack Carlton, Jane J. Connolly, Carmel P. Dooley, Marcus A. C. Dowling, Jessie Edwards, Ruth M. Howitt, Alice Moffatt, Surgeon-Captain Edmond J. Mockler, Drs. Eleanor J. More, Geoffrey D. K. Needham, Constance S. Pimm, Michael J. Rayner, Myrtle V. Richards, W. T. Densham Ray, Martha G. Robson, Rachel F. E. Spicer, Ronald G. Sprenger, Walter P. B. Stonehouse, Tom A. J. Thorp, Edward L. Troughton and James H. Walsh.

**As Associate**—Sgt. John J. Kavanagh, M.R.I.P.H.H.

Several nominations for the next election were reported, and the meeting then terminated.

#### EAST ANGLIAN BRANCH

**President** : Dr. K. F. Alford (Dep. C.M.O.H., Norfolk).

**Hon. Secretary** : Dr. A. J. Rae (Dep. C.M.O.H., West Suffolk). A meeting of the Branch was held at the Scole Inn, Scole, on Saturday, November 7th, 1953, at 3 p.m. The President was in the chair and 21 members were present.

Dr. Tyser submitted a report on the Branch's proposals for research with regard to the incidence of warts in school children, and informed the meeting that progress was being made towards the start of the survey.

It was reported that Dr. W. B. Christopherson was eligible for life membership of the Society, and it was decided that the Branch should recommend his election.

Dr. K. F. Alford then gave a very interesting Presidential Address entitled "Changi," in which he spoke of his experiences during the time he was a prisoner of war in Japanese hands. Dr. Alford dealt in particular with the medical aspects of the subject and emphasised the humorous incidents and the part they were made to play in maintaining morale. The meeting passed a hearty vote of thanks to Dr. Alford.

It was decided that the next meeting of the Branch should be held at Bury St. Edmunds at 3 p.m. on Saturday, March 6th, 1954, and that if possible the subject should be "The Social History of Bury St. Edmunds, with special reference to its sanitation."

#### METROPOLITAN BRANCH

**President** : Brig. A. E. Richmond (Ministry of Health).

**Hon. Secretary** : Dr. F. M. Day (M.O.H., Hammersmith Met. B.).

A meeting of the Branch was held in B.M.A. House, Tavistock Square, W.C.1, on Friday, January 8th, 1954, under the chairmanship of the President. Fifty-seven members and visitors were present.

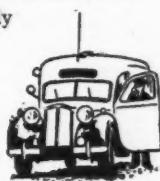
After routine business had been transacted an address on "Changing Social Problems in London" was given by Basil L. Q. Henriques, Esq., C.B.E., J.P. Mr. Henriques's address was of such interest that any attempt to reproduce it from notes obviously could not do justice to its effect as a whole. He referred to his recollections of the East End of London from 1913 onwards, when he first started to work there. He made comparisons with

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the "gutter snipes" of those days with present-day "spivs" immaculately dressed in their peculiar fashion. He stressed the different relationship which now exists between parents and their children, and that women no longer think child-bearing and child-rearing to be their main function. It is "I see; I want; I take," not "I must because I ought" and "I must not because I may not."

A stronger sense of right and wrong is necessary and we must give up looking at wrong-doing as a complex. The increase in divorce must not result in children seeing warfare, hostility and unhappiness between their parents in the home. Local authorities should work more on the homes of the people, and a home should be worth coming home to. Mr. Henriques gave it as his opinion that the most wonderful of all social services existing to-day was the Family Service Unit. They had produced a new form of social worker who will actually go and live with problem families until a permanent improvement is produced. These people were really saints. There were only too few family service units available, however, and more finance was required to increase their numbers.

Forty-four per cent. of juvenile delinquents came from homes where one or more other members of the family had been convicted of crime. In fact far fewer families were affected than was thought, as the delinquents are concentrated in this way.

It was almost true to say that there were no Jewish juvenile delinquents. The few Homes made available for them were almost empty. The Jews had a fine system of a Board of Guardians who dealt with the whole family unit and produced the focus on the children's environment.

The London County Council was far too large and its multiple departments worked behind water-tight doors. Such an authority could not succeed as the public wanted it to because of this. The Jewish Board of Guardians had every department under one heading, and was ideally designed to deal with the family and not the individual.

One family containing juvenile delinquents was costing the L.C.C. £2,000 a year. A new flat would solve their problem, but the L.C.C. are blind to such a solution. There must be greater co-operation between departments at County Hall. Money would be saved and social work would improve.

During the discussion which followed the address questions were put to Mr. Henriques by the President, Drs. Pirrie, O'Shiel, etc., and a vote of thanks was proposed by Dr. Bradley.

#### MIDLAND BRANCH

*President*: Dr. Jean M. Mackintosh (Admin. M.O.H. (M.C.W.), Birmingham C.B.).

*Hon. Secretary*: Dr. W. R. Martine, O.B.E. (Admin. M.O.H. (G.P.), Birmingham C.B.).

The third meeting of the Session was held at Lancaster Street Welfare Centre, Birmingham, on Thursday, December 3rd, 1953, at 3 p.m. The President was in the chair and 26 members and one guest attended.

Apologies were received from 18 members.

The Hon. Treasurer presented his annual statement of accounts certified by the Hon. Auditors and giving comparative figures for the year 1951-52. Dr. Griffin drew attention to the slowly dwindling bank balance. It was resolved that the statement of accounts be adopted.

After discussion as to ways and means of improving the financial position of the Branch, it was resolved that representations be made to the Society that the annual capitation fee should be increased from 2s. 6d. to 3s. 6d.

#### Mental Health and the Local Health Authority

Dr. W. Nicol, Administrative M.O.H. (Mental Health), Birmingham, then gave an address on this subject. He opened with a plea for "preventive psychiatry" and not by providing more psychiatrists but rather by means of the other workers in the general and mental health fields of public health work. Any public health department should be competent to organise a Mental Hygiene Service.

Both biological and social factors had a bearing on mental health, and a scheme of allocation of medical priority in rehousing brought out the supreme importance of the social factor in mental health. Third only to respiratory complaints and tuberculosis, mental ill-health was responsible for no less than 12.08% of all referrals on health grounds, while 15 out of 45 cases rehoused as a matter of urgency outside the points scheme were referred on account of mental illness or nervous affections.

All local health authorities must have a Mental Health Service, but were they adequate, or as fully developed as they ought to be? The Birmingham picture probably represented fairly the scheme in operation in the large county boroughs.

Here an Admin. M.O.H. for Mental Health was directly responsible to the M.O.H. for the development, co-ordination and administration of the Mental Health Service, including the submission of reports to committee.

Three sections comprised the service in Birmingham:—

(1) Psychiatric Social Service—three P.S.W.s and

three S.W.s, with two part-time consultants behind them.

(2) Mental Deficiency Section—five inspectors.

(3) Mental Welfare Service—five duly authorised officers.

Two points must be appreciated if a comprehensive Mental Health Service were to emerge. Preventive psychiatry must have a more important place in medical education—not that the M.O.H. should be a psychiatrist, but that he should be aware of factors inimical to mental health, and of opportunities available to him for the promotion of healthy psychological development.

The prevention of mental illness was so vast a problem that it required team work embracing workers outside the medical profession—welfare workers in general and also teachers, clergymen and lawyers. Education in mental health should be extended to undergraduates studying for the Church or the Law. Were not these professions vitally concerned with mental health? Similar provision should also be made in the training of health visitors and district nurses, and, above all, the teaching profession should have as wide a knowledge as possible of human behaviour and healthy psychological development. A five-day course was now being held in Birmingham embracing all classes of worker in mental health.

The health education of the public was a more difficult problem but progress was being made by inclusion of health, including mental health education, in the normal school curriculum and by talks at ante-natal clinics by a consultant psychiatrist, with subsequent follow up at welfare centres. Dr. Nicol felt that the Press should be approached with a view to playing down crimes of violence, sexual excess and perversion.

On the question of the Duly Authorised Officer, it was unfortunate that there was no specific qualification. A qualifying course would put their work in the proper medical perspective and break once and for all the old poor law outlook.

As to the Psychiatric Social Service section, this work was rapidly expanding in Birmingham and we were already seeing benefit from the help we were giving to hospitals. It was felt that we could similarly help the G.P. who, thinking himself inadequate to deal with such problems, generally referred his cases to the already overcrowded out-patient departments. A pilot study of the G.P.-P.S.W. relationship was in fact under consideration and group discussions had already taken place between Children's Department and Health Department, with H.V.s and a P.S.W. in attendance. The National Assistance Board, Ministry of Labour, and Probation Officers might equally be brought in in this way.

The Parents' Guidance Clinic has been most helpful in correcting faulty management in the early informative years while a Health Advice Bureau, with the medical and clerical professions working together, had recently been opened.

In regard to care of the aged, too little attention had been paid to the emotional factors. Loneliness bred feelings of rejection and uselessness. Was there not a place on housing estates for old people who could look after children where the mother had to go out to work?

Finally most of our mental deficiency problems were presented by high-grade defective. Certification, though a convenient solution, was the wrong answer to the problem. Residential hostels were required, and facilities for training provided outside the institution—the only present possibility. Where the low grade were concerned, could more help not be given to the parents during the waiting list period?—a laundry service and the provision of playpens alone would prove most beneficial to the harassed overworked parent.

A discussion followed, with Drs. J. F. Galloway, Shennan, Griffin, Coulsting, Millar, Ramage, Starkie, Lawson, Ross and Dodds taking part. A hearty vote of thanks was accorded to Dr. Nicol on the motion of Dr. Galloway.

#### WELSH BRANCH

*President*: Dr. G. McKim Thomas (M.O.H., Cardiff Rural District).

*Hon. Secretary*: Dr. R. T. Bevan, (Dep. C.M.O.H., Glamorgan).

A meeting of the Branch was held at B.M.A. House, 195,



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Newport Road, Cardiff, on December 11th, 1953, when there were 27 members present.

Professor Grundy introduced Mr. Curran, the medical student who had been awarded the Hygiene Prize of the Society for 1953, and the President presented the prize to Mr. Curran.

#### Gastro-enteritis of Babies

Dr. Scott Thomson then addressed the meeting on this subject. The following is a summary:—

A number of types of *Bact. coli* are now believed to cause gastro-enteritis in babies under one year of age. These types, although possessing some cultural characteristics in common, are typical faecal *Bact. coli*. Infection by these types is the commonest cause of severe gastro-enteritis in babies.

Cross infection by these organisms within babies' wards, nurseries and the like is exceedingly difficult to control. The disease is highly infectious but apparently only among the young. There is a suspicion that the high infectivity is related to the large numbers of the pathogens found in the gut, but Dr. Thomson doubted this theory, as there are large numbers of pathogens in the gut in other intestinal diseases.

Infection is only rarely found in adults, and then usually in very old, debilitated persons. Bacilli of the suspected types cannot be isolated from nurses and other attendants who handle babies suffering from gastro-enteritis. This and other evidence has led to the view that the epidemiology of the disease can be considered as appertaining to children only. Unfortunately, the techniques used make it difficult to identify the carrier who harbours only a few bacilli—there is no selective medium—and the part played by healthy carriers is still undetermined.

Dr. Thomson mentioned some of the changes in flora of the gut with changes in diet and suggested that it might be profitable to consider the bacteria in the lumen of the gut rather than those producing irritation of the wall. It was known that babies who died of this disease showed virtually no inflammation of the wall of the gut.

The possible part played by *Bact. coli* of special types in neonatal diarrhoea was still not clear.

There followed a lengthy discussion and among those who took part were Dr. Greenwood Wilson, who gave an account of the experiences of gastro-enteritis in Cardiff hospitals, and Dr. W. E. Thomas, who suggested that the variations in infant mortality in different areas may, in part, be due to this infection occurring in localised epidemics.

Dr. Trevor Jones in moving a vote of thanks reminded the Society of the valuable services Dr. Scott Thomson had given to Welsh hospitals.

Dr. Anderson, in supporting the vote of thanks, thanked the speaker for an instructive and interesting address.

#### MATERNITY AND CHILD WELFARE GROUP

*President* : Dr. Mary Fisher (M.O.M.C.W., Oxford C.B.).  
*Hon. Secretary* : Dr. Doris Craigmire (Asst. Admin. M.O.H., Birmingham C.B.).

*Hon. Asst. Secretary* : Dr. Mary P. Paterson (M.O., L.C.C.).

#### Child Health Services in North America

A general meeting was held in the Old Library, B.M.A. House, on November 7th, 1953, at which Dr. Hilda Davis (Buckinghamshire C.C.), gave a talk on "Samples of the Child Health Services in America." She pointed out that she had only visited four States in the U.S.A.: New York, Minnesota, California, and Oregon, and the Province of Manitoba in Canada during three months' stay and, therefore, the facts and impressions she presented could only be regarded as samples, not necessarily applicable to the whole country.

In the United States, she said, there is no national standard for medical and hospital care; these vary from State to State, each making its own laws for public services. In the best it is very good, but the more backward States make limited provision. Approximately two-thirds of the population are not eligible for State medical and hospital care and therefore procure this privately or with the assistance of insurance schemes. The lower income groups are assessed for reduced charges in hospital out-patient and ward service and only the indigent receive free medical care.

There are proportionately fewer trained nurses on hospital wards, and these supervise the work of practical nurses, who have done one year's training, and nursing aides who put in 100 hours' training. Registered nurses usually have two years' university course followed by three years in hospital. Public health nurses who do work similar to our health visitors are fully trained nurses with an additional year's course at a university. They visit only the mothers who are eligible for hospital ward service, 10% to 30% of the total, and often pay one visit only, unless follow-up visits

are requested from the child health centre. Practically all deliveries are in hospital and attended by a doctor; discharge home on the third day is usual in normal cases. There seem to be few ill-effects from this early discharge, but breast-feeding for longer than a month is rare.

Child health centres are similar to those in this country, but fewer mothers attend and then by appointment only. Centres are usually well equipped, and are held in public health centres, though in country areas, especially in Canada, some are in village halls or private houses. All mothers see the public health nurse, who undertakes most of the immunisation. This is a combined injection against diphtheria, whooping cough and tetanus, and is usually started at three months. The medical officer of the centre is usually a private physician or a paediatrician employed on a sessional basis. There is more group teaching than here, and greater interest and knowledge is shown by the mothers. Voluntary workers play an important part in the centres. They have some training and then undertake weighing, sit in with the doctor and take notes, keep all records and supervise the toddlers' play-room.

Many children are under the care of private paediatricians, of whom there are many; these hold well-baby clinics for patients in their practice. The public health nurse also does infectious disease and tuberculosis visiting (B.C.G. is not used), and school nursing.

The school health service differs from that in this country. There is no routine medical inspection; the public health nurse or teacher selects children to be examined by the doctor; routine vision and audiometric testing is carried out on all children. Any child needing treatment is referred to a private doctor or hospital.

Social welfare departments look after deprived, illegitimate and handicapped children, though in some States there is a crippled children's division in the health department. The number of residential homes for children is being gradually reduced and fostering is widely and successfully used for all types, not only of deprived but of mentally and physically handicapped children. Supervision is undertaken by the social welfare department in cooperation with the health department.

After Dr. Davis had replied to a number of questions a vote of thanks was proposed by Dr. Gray and carried unanimously.

#### NORTH-WESTERN M. & C.W. & S.H.S. SUB-GROUPS

*President* : Dr. Hilary Crewe (S.M.O., Stockport C.B.).

*Hon. Secretary* : Dr. E. M. Jenkins (Sen. S.M.O., Manchester C.B.).

The first meeting of the sub-groups for the session 1953/54 was held in the Public Health Committee Room, Third Floor, Town Hall Extension, Manchester, on Friday, October 23rd, 1953, at 5 p.m. At 4.15 p.m., a committee meeting was held at which the programme for the coming session was discussed.

At the general meeting, 13 members were present.

Dr. Hilary Crewe was then duly installed as the President for the ensuing session by the retiring President, Dr. Margaret Sproul, who said the honour was truly earned. Dr. Crewe had been a very enthusiastic and active member, one who had attended most regularly all the meetings since the opening meeting of the sub-groups held on May 11th, 1945.

Dr. Sproul went on to say that she hoped the members thought hers had been a successful year. She certainly had enjoyed it thoroughly. Her thanks were particularly due to the Honorary Secretary.

The new President then took the chair and called upon Dr. Hugh Craig to propose a vote of thanks to the retiring President. He did so in a few well-chosen words, mainly Scottish, and his remarks were vociferously acclaimed.

The next item on the Agenda was "Correspondence," and the Honorary Secretary was asked to read two special letters received. The first from Dr. Metcalfe Brown, the President of the Society, expressed regret at his inability to be present and he extended his congratulations and good wishes to Dr. Crewe and to the members of the sub-groups. At the previous meeting, the Honorary Secretary had been asked to write to Dr. E. H. Walker, expressing the members' sorrow at his ill-health and his reply was next read. He regretted that he was prevented by illness from being present at the last two or three meetings and thought that he would be much the better for seeing all his colleagues again at future ones.

The next item dealt with was the presentation of reports by the representatives who had attended Council meetings of the Maternity and Child Welfare and School Medical Officers Groups. Dr. Crewe delivered her Presidential Address, entitled "An Enuresis Clinic" (published in the March issue of *Public Health*).

A vote of thanks was proposed by the Honorary Secretary who complimented the President on her most excellent exposition of this interesting subject.



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